



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,382	01/22/2002	Richard David Robinson JR.	40934.010600	6959
22191	7590	02/18/2004	EXAMINER	
GREENBERG-TRAURIG 1750 TYSONS BOULEVARD, 12TH FLOOR MCLEAN, VA 22102			PALO, FRANCIS T	
		ART UNIT	PAPER NUMBER	
		3644		

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/051,382	ROBINSON ET AL.
	Examiner Francis T. Palo	Art Unit 3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 August 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,5-8 and 27-38 is/are pending in the application.
- 4a) Of the above claim(s) 35-38 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,5-8 and 27-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 35-38 are withdrawn from consideration as being directed to a non-elected invention.

See 37 CFR 1.142(b) and MPEP § 821.03.

Newly submitted claims 35-38 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Newly presented claims 35-38 are drawn to the non-elected invention of Group-IV, as they are directed to aerial chemical agent delivery means, and not to the elected invention of Group-I, directed to a pneumatic gun.

The Examiner does consider the newly presented claims 27-34 to be directed to the elected invention of Group-I however.

***Response to Arguments***

2. Applicant's arguments filed 8/6/03 have been fully considered but they are not persuasive.

The traversal regarding the rejection of claims 1-3 (***35 USC § 102(e)***), and of claims 4-8 (***35 USC § 103(a)***) is acknowledged, as is the amendment of claims 1 and 5, and the presentation of new claims 27-38.

Regarding the traversal of the ***35 USC § 103(a)*** rejection of claims 4-8:

Applicants assert the Pearce '367 reference with a publication date of 12/27/2001 and filing date of 8/15/2001 is not proper art under ***35 USC § 103(a)***, with respect to the subject application priority date of 1/19/2000.

The Examiner wishes to point out, that a patent application publication published under 35 U.S.C. 122(b) is available as prior art under 35 U.S.C. 102(e), (and thus is available as prior art under 35 U.S.C. 103(a)) as of the earliest effective U.S. filing date of the published application against U.S. applications filed prior to 11/29/2000 (see MPEP 901.02). As the Pearce '367 reference filed 8/15/2001, is a continuation-in-part of application # 09/457,899 filed on 12/9/1999 (now abandoned), the earliest effective U.S. filing date of the published application is 12/9/1999, and not 8/15/2001 as argued by the applicant. Furthermore, the subject matter of the instant claim-4 is fully disclosed in the 09/457,899 abandoned application, and it is therefore the Examiners contention that the earliest effective filing date of the Pearce '367 reference is 12/9/1999, and that the ***35 USC § 103(a)*** rejections are proper and therefore maintained and repeated in this final office action.

Regarding the traversal of the rejection of claims 1-3:

The Examiner acknowledges that with the incorporation of the claim-4 limitation into independent claim-1, the **35 USC § 102(e)** rejections of claims 1-3 are moot. The Examiner does not however concur with the applicant's assertion that the claims are now in condition for allowance; rather, in light of the preceding discussion of the traversal of the claim 4-8 rejections, the subject claims are rejectable under **35 USC § 103(a)**, (Hayes '913 in view of Pearce '367).

### ***Claim Objections***

3. Claims 1, 30 and 33 are objected to because of the following informalities: in the claims, "said pesticide" should be --said pesticide and attractant--. Appropriate correction is required.

Claim-31 is objected to because of the following informalities: in the claim, "attractant" should be --pesticide--;

The Examiner believes "spinosad" as cited in the claim to refer to an insecticide used to control a variety of insect pests, including fruit flies, which is commercially available.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-3, 5-8,27,28, and 30-32** rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. (US 6,306,913) 2001, in view of Pearce et al. (US Publication 2001/0054367 A1) 2001.

Regarding **claims 1 and 30**:

Hayes '913 discloses a pesticide delivery system for forming a bait station, comprising:

- A packaged delivery container, such as a pre-filled projectile, [(e.g., a so-called "paint ball"; column-2, lines 7-8),(encased in a suitable polymer; column-2, lines 23-26; read as "a flexible material"),(see also Hayes claims 1-2)];
- Additionally, the container for delivering the pesticides may optionally be used together with bait or other materials that either serve to attract or repel the intended target of the pesticide (column-3, lines 1-4);  
read as "at least one pesticide and at least one attractant stored within said vessel", as cited in the instant claim.

- Application by projectile, whereby a paint ball containing the specific amount of pesticide would be applied to the site by loading it in a paint ball gun, aiming it at a target and shooting, (column-7, lines 30-35; also see Hayes claim-5).

Hayes does not specifically disclose a spherical vessel having a diameter greater than 0.68 inches.

Hayes does disclose that any container that emits the contents upon contact should be considered a projectile for purposes of his application (column-2, lines 5-16).

Pearce '367 teaches a pesticide delivery system including a projectile and a gas-propelled, projectile launching device (Abstract).

Pearce further teaches that if desired for safety or other reasons, the caliber of projectile and barrel of the projectile launching device can be selected so as to avoid interchangeability with conventional paint balls (paragraph [0039]).

It would have been obvious to *phosita* at the time the invention was made, to have dimensioned the spherical vessel of Hayes as cited in the instant claim, so as to avoid interchangeability with conventional spherical vessels, as taught by Pearce.

Independent claim-30 (citing treatment of insects) is encompassed by independent claim-1; as the system of Hayes is intended for pesticide administration to scolytids (insects); therefore, claim-30 is rejected as discussed above.

**Regarding claims 2 and 3:**

The discussion above regarding claim-1 is relied upon.

Hayes cites in claim-4 a gelatin pesticide container, (read as; biodegradable).

**Regarding claim-5:**

The discussion above regarding claim-1 is relied upon.

The spherical vessel of Hayes as modified, is capable of the dimension as cited in the instant claim; as further such modification is merely an alternate equivalent spherical vessel dimensioned to avoid interchangeability with conventional spherical projectiles, as taught by Pearce and discussed above in the rejection of claim-1.

**Regarding independent claim-6:**

The discussions above regarding claims 1 and 3 are relied upon.

The instant claim directed to a pesticide delivery system, is merely a broad restatement of the instant independent claim-1, along with the gelatinous vessel as cited in the rejection of claim-3, thus rendering the combination likewise obvious to *phosita*.

**Regarding independent claim-7:**

The instant independent claim is merely a restatement of the pneumatic gun of instant independent claim-1, chambered for a encapsulated chemical agent greater than 0.68 inches in diameter; the delivery means, vessel dimension and chemical agent have been thoroughly discussed.

Nevertheless; Hayes discloses a paint ball containing the specific amount of pesticide would be applied to the site by loading it in a paint ball gun, aiming it at a target and shooting,(column-7, lines 30-35; also see Hayes claim-5).

Hayes further discloses under the paragraph "Application by Projectile", that the paint balls are typically fired from air (CO2) powered guns, and that commercially available paint ball gun devices and paint balls are well known, and have become an industry in the United States (column-7, lines 21-36).

Pearce teaches that if desired for safety or other reasons, the caliber of projectile and barrel of the projectile launching device can be selected so as to avoid interchangeability with conventional paint balls (paragraph [0039]).

The obviousness of the larger caliber has been discussed above and considered an obvious modification.

The features of the pneumatic delivery device as cited in the instant claim are considered inherent to the paint ball guns of Hayes and Pearce,

while Pearce and the instant invention have in common the motivation to increase the caliber of the paint ball and the device to deliver the pesticide.

**Regarding claim-8:**

The discussion above regarding claim-7 is relied upon.

As discussed above in the rejection of claim-7, the features of the pneumatic delivery device as cited in the instant claims are considered inherent to the paint ball guns of Hayes and Pearce.

**Regarding claim-27:**

The discussion above regarding claim-1 is relied upon.

Hayes while disclosing paint balls have a range of over 100 yards using standard equipment (column-8, lines 2-4), does not specifically disclose an acceleration to a velocity of at least 300 feet-per second, as cited in the instant claim.

Pearce teaches the preferred launch velocity of projectiles weighing from about 0.5 to about 1.0 grams is about 600 feet per second, and to avoid breaking window glass at close range, should not exceed about 1000 feet per second.

It would have been obvious to *phosita* at the time the invention was made, to have further modified the gun of Hayes as modified,

to launch the vessels at a velocity as cited in the instant claim for the well-known advantages of that feature, specifically, to avoid breaking window glass at close range, as taught by Pearce.

**Regarding claim-28:**

The discussion above regarding claim-1 is relied upon.

Hayes discloses a projectile can be used to administer pesticides (Abstract), and that the pesticides may include repellents (column-7, lines 23-25).

Hayes further discloses screening compounds and *Drosophila* (fruit flies) repelling as prior art (column-6, lines 35-38), as cited in the instant claim.

**Regarding claim-31:**

The discussion above regarding claims 1 and 30 is relied upon.

Hayes discloses compounds for a pesticide for insects; Hayes does not specifically disclose a spinosad.

Hayes further discloses it is not possible to predict on the basis of structure which compounds will make good repellants (column-6, lines 42-44).

It would have been obvious to *phosita* at the time the invention was made, to have utilized a readily available insecticide such as a spinosad as the pesticide in the system of Hayes as modified, as further such choice of insecticide could be arrived at through routine test and evaluation,

which is the scope of the Hayes invention in screening insecticides, and it has been held that routine test and evaluation requires involves only routine skill in the art, and therefore it would have been obvious to evaluate an alternate equivalent pesticide such as cited in the instant claim.

**Regarding claim-32:**

Hayes does not disclose a wax matrix material for the spherical vessel; Hayes does disclose other similarly effective materials can also be used provided that such materials are capable of carrying the control agent and can withstand launching ([0031]).

It would have been obvious to *phosita* at the time the invention was made, to have utilized a wax matrix material for the spherical vessel of Hayes a modified, as further such modification is merely a functional equivalent projectile body material performing the same intended function of capably carrying control agents, as taught by Hayes.

5. **Claims 29, 33 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. (US 6,306,913) 2001, in view of Pearce et al. (US Publication 2001/0054367 A1) 2001 as applied to claim-1 above, and further in view of MacDonald (US 5,174,807).

**Regarding claims 29, 33 and 34:**

The discussion above regarding claim-1 is relied upon.

Hayes as modified by Pearce teaches the use of a modified projectile to administer pesticides from a modified pneumatic gun, as discussed above;

Hayes as modified, does not disclose firing said gun from an aerial vehicle as cited in the instant claim.

Pearce teaches a control agent delivery system useful for dispersing a pesticide, herbicide, fungicide or other biocide around a target or target area that is not directly accessible or that is hazardous to the user (Abstract).

MacDonald '807 teaches transporting pneumatic guns by helicopter to eradicate plants on inaccessible terrain with herbicide filled frangible hollow balls.

It would have been obvious to phosita at the time the invention was made, to have to have utilized an aerial vehicle from which to discharge the pneumatic gun of Hayes, so as to eradicate plants on inaccessible terrain,

as cited in the instant claim; as MacDonald teaches transporting pneumatic guns by helicopter to eradicate plants on inaccessible terrain, which is encompassed by Hayes as modified by Pearce.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis T. Palo whose telephone number is 703-305-5595. The examiner can normally be reached on T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles T. Jordan can be reached on 703-306-4159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Charles T. Jordan*  
CHARLES T. JORDAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3000

*Francis T. Palo*  
Francis T. Palo  
Examiner  
Art Unit 3644